

Indian Bend Road Improvements Scottsdale Road to Hayden Road

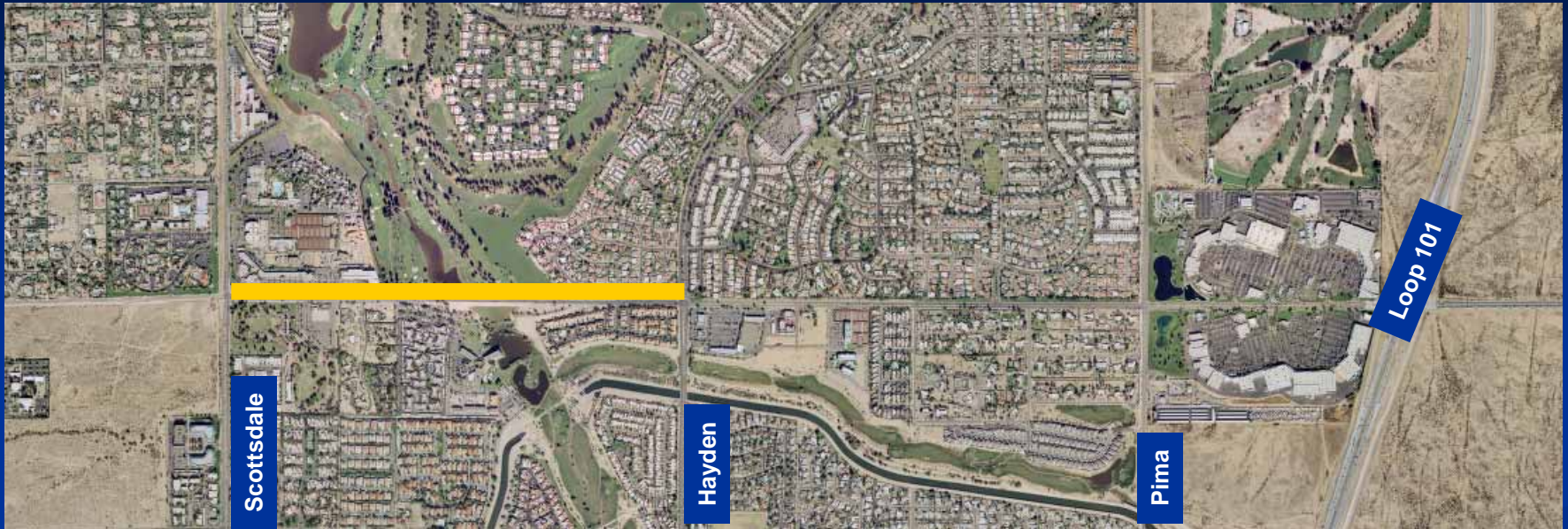
Design Concept Study



**City of Scottsdale
Transportation Commission**

June 16, 2005

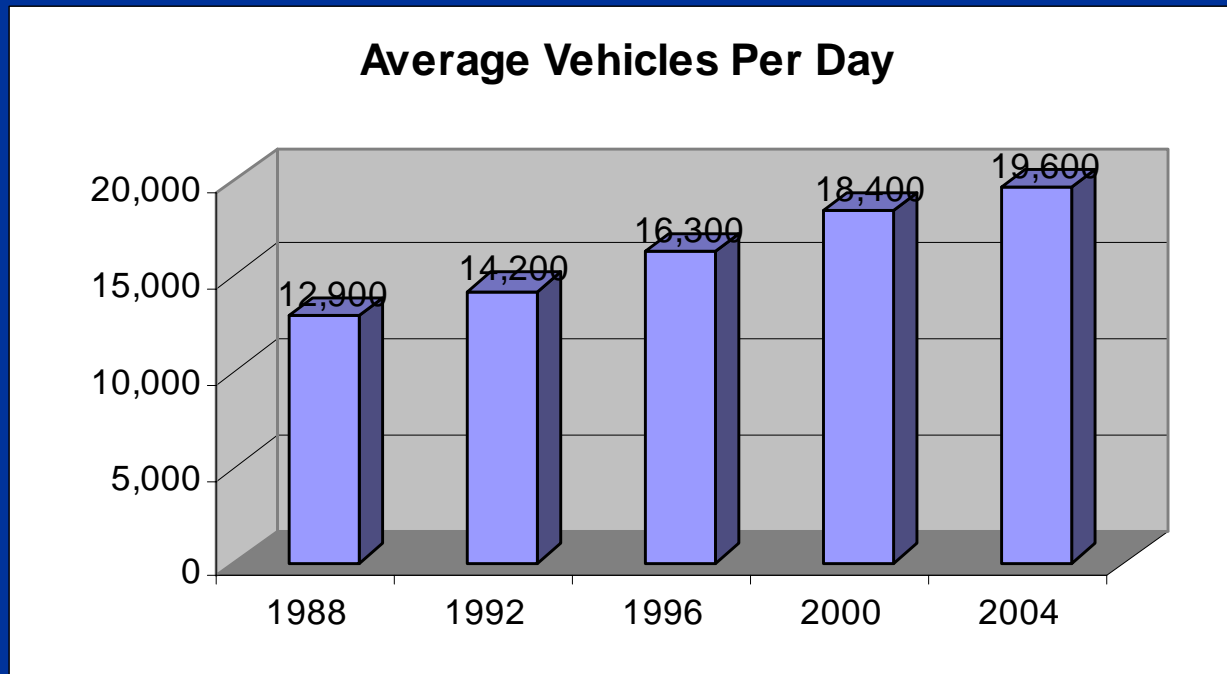
Background



- Designated as 4-lane Minor Arterial in *Streets Master Plan*
- Originally designed in 1981
- 4 lanes completed from Hayden to Pima in 1999
- Connects Scottsdale Road and Pima Freeway
- Included in Bond 2000 election

Project Goals

- Manage growth in traffic volumes
 - 12,900 vehicles per day in 1988
 - 19,600 vehicles per day in 2004
 - 25,000-30,000 vpd in 2020



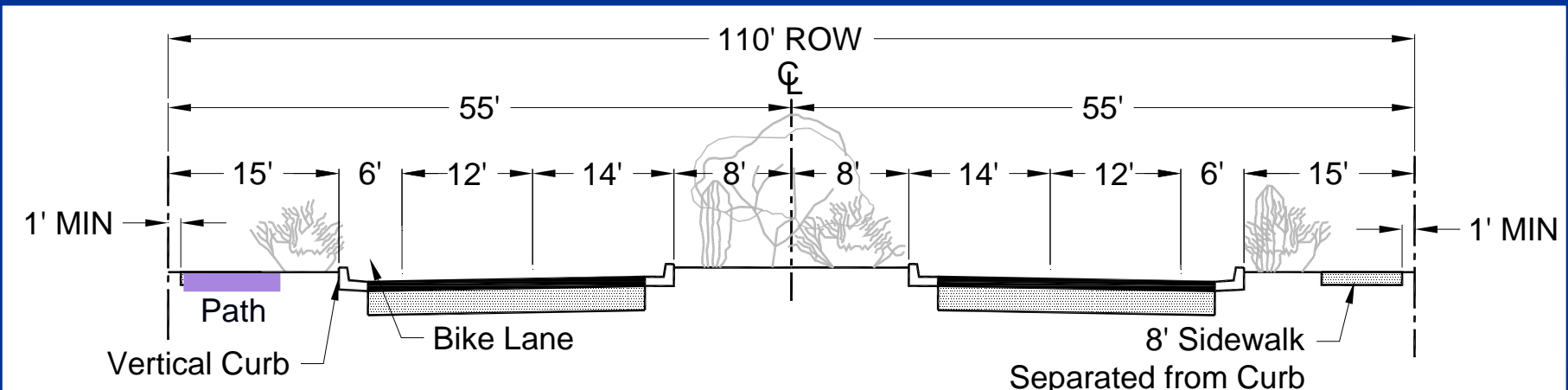
Project Goals

- **Improve Drainage/Enhance Safety**
 - Wash crossing
 - Curb/Gutter
 - Medians/Turn Lanes



Project Goals

- **Bicycle/Pedestrian Enhancements**
 - Multi-use path on north
 - Sidewalk on south
 - On-street bike lanes



Project Goals

- Landscaping/Aesthetic Enhancements
 - Medians and back of curb
 - Wash crossing
 - Power lines
 - Public art



Improvement Alternatives



Segment 1: Scottsdale Road to Paradise View



Alternative 1.A – Avoid Existing Drainage Channel

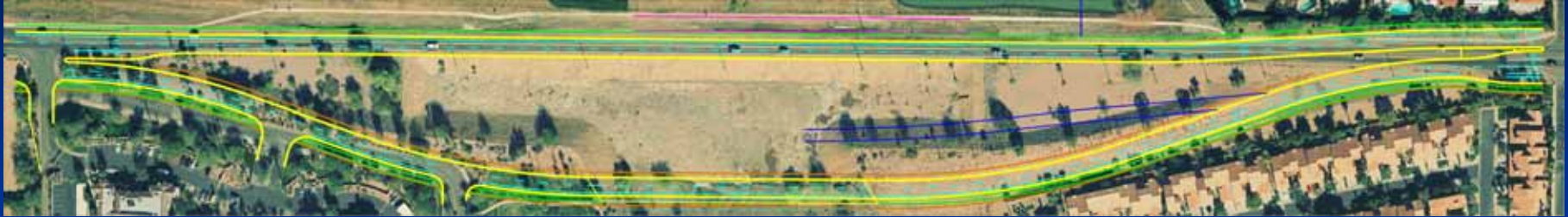


Alternative 1.B – Widen Equally from Center

Segment One Issues

<u>Alternative</u>	<u>Impacts to Existing Facilities</u>	<u>Proximity to Nearest Home</u>	<u>Intersection Congestion</u>	<u>Roadway Noise</u>	<u>Cost</u>
1.A	Railroad Park parking	approx. 60'	Improves	Rubberized asphalt	\$2.3M
1.B	Drainage Channel	approx. 80'	Improves	Rubberized asphalt	\$6.1M

Segment 2: Paradise View to 78th Place

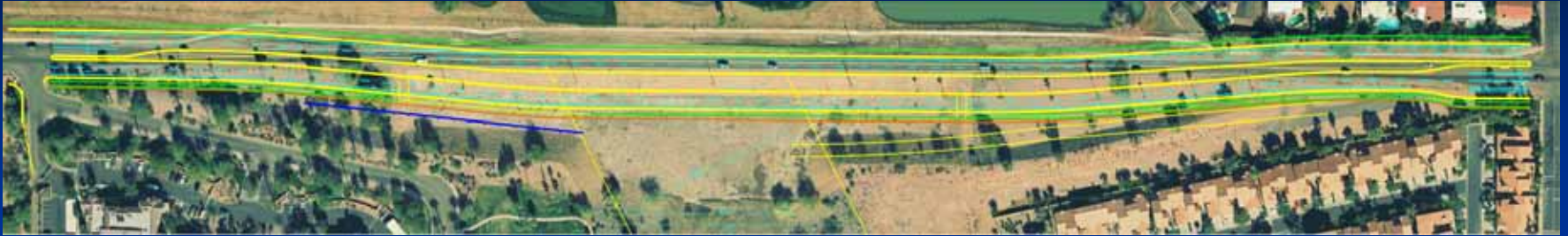


Alternative 2.A – 2-lane bridge eastbound (1981 concept)

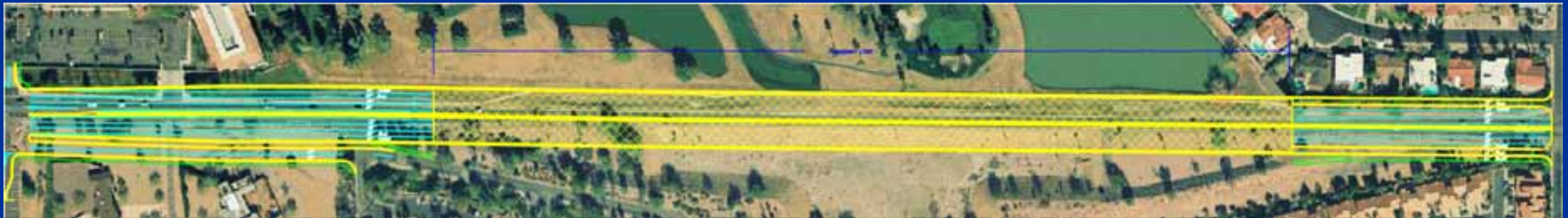


Alternative 2.B – 4-lane wash crossing with low bridge

Segment 2: Paradise View to 78th Place



Alternative 2.C – Long 2-lane bridge eastbound



Tunnel Concept - Villa La Playa Homeowners Association

Segment 2: Paradise View to 78th Place



Tunnel Concept – Auxiliary/Access Lanes

Segment Two Issues

<u>Alternative</u>	<u>Road Elevation at Wash</u>	<u>Roadway Operations</u>	<u>Proximity to Nearest Home (near wash)</u>	<u>Proximity to Nearest Home (near 78th Pl.)</u>	<u>Access Changes</u>	<u>Roadway Noise</u>	<u>Cost</u>
2.A	11'	2 lanes open in flood	approx. 30'	approx. 25'	none	Rubberized asphalt	\$5.4M
2.B	0'	4 lanes open in flood	approx. 140'	approx. 30'	none	Rubberized asphalt	\$9.0M
2.C	12'	2 lanes open in flood	approx. 160'	approx. 30'	none	Rubberized asphalt	\$9.8M
Tunnel	< 0'	4 lanes open in flood	approx. 180'	inside back walls	3	Tunnel	\$40-60M+

Segment 3: 78th Place to Hayden Road



Alternative 3.A – Single left turn lane at Hayden



Alternative 3.B – Additional left turn capacity at Hayden

Segment Three Issues

<u>Alternative</u>	<u>Impacts Path Width</u>	<u>Proximity to Nearest Home</u>	<u>Intersection Congestion</u>	<u>Roadway Noise</u>	<u>Cost</u>
3.A	No	approx. 30'	Limited benefit	Rubberized asphalt	\$0.89M
3.B	Yes	approx. 25'	Improves	Rubberized asphalt	\$0.91M

Proposed Next Steps

- **Present Recommended Alternative to Transportation Commission**
 - **July/August 2005**
- **Final Design Contract to City Council**
 - **September/October 2005**